

# BIOMOLECULE CARD SORT

## Directions:

Use this late in the unit or for review.

Deal the cards equally to all students in the group. Each student gets a turn to place a card. Generally 3 or 4 students in a group. Go in Clockwise order. Students should discuss where they are placing the card and why they chose that location.

place the cards in the correct area. Some of the cards will go in the middle between two sections.

Hold the students accountable for their work by giving them a sentence stem for their journals like:

- Compare and contrast the four biomolecules
- Biomolecules are found ...
- Justify why you put some answers in the middle between sections
- An excess or shortage of biomolecule effect the body. ...

# BIOMOLECULES

CARBOHYDRATES

LIPIDS

PROTEIN

NUCLEIC ACID

SOME ARE FORMED IN  
CHLOROPLASTS

SOME ARE FORMED BY  
THE SMOOTH  
ENDOPLASMIC  
RETICULUM

FORMED AT  
RIBOSOMES

FORMED IN THE  
NUCLEUS

SHORT TERM  
ENERGY STORAGE

LONG TERM  
ENERGY STORAGE

USED AS ENERGY SOURCE  
ONLY WHEN OTHER CARBS  
AND LIPIDS ARE IN SHORT  
SUPPLY

TYPICALLY NOT AN  
ENERGY SOURCE

C, H, O  
1:2:1

C, H, O

C, H, O, N

C, H, O, N, P

MONOSACCHARIDE

TRIGLYCERIDE

AMINO ACID

NUCLEOTIDE

CELLULOSE

GLUCOSE

FRUCTOSE

PHOSPHOLIPID

OIL

EAR WAX

HAIR

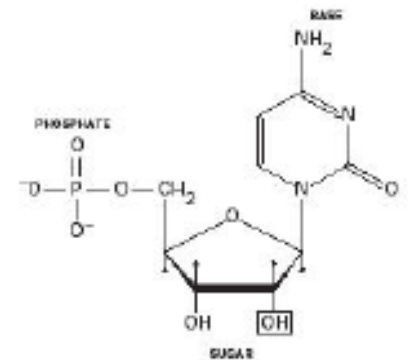
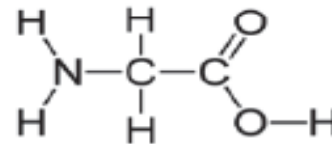
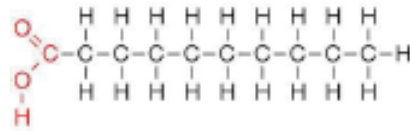
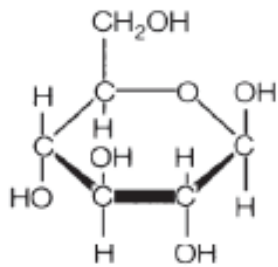
NAILS

MUSCLES

ENZYMES

RNA

DNA



CONSIDERED TO BE  
AN ORGANIC  
COMPOUND

CONTAINS  
CARBON

CONTAINS  
NITROGEN

CONTAIN  
PHOSPHOROUS

FOUND IN LARGE  
AMOUNTS IN  
POTATOES

FOUND IN STEROID  
HORMONES LIKE  
ESTROGEN

FOUND IN A BITE  
OF STEAK

NOT FOUND IN  
A CELL  
MEMBRANE

CARBOHYDRATES

LIPIDS

PROTEINS

NUCLEIC ACIDS

# KEY BIOMOLECULES

## CARBOHYDRATES

POTATOES  
MONOSACCHARIDE  
SOME ARE FORMED IN CHLOROPLASTS  
CELLULOSE, GLUCOSE, FRUCTOSE  
CHO 1:2:1  
SHORT TERM ENERGY STORAGE  
CARBOHYDRATES  
FOUND IN LARGE AMOUNTS IN POTATOES

## LIPIDS

TRIGLYCERIDE  
BUTTER  
CHO  
LIPIDS  
SOME ARE FORMED BY THE SMOOTH ENDOPLASMIC RETICULUM  
PHOSPHOLIPIDS, OIL, EARWAX  
LONG TERM ENERGY STORAGE  
FOUND IN STEROID HORMONES LIKE ESTROGEN

## PROTEIN

MEAT, CHEESE, FISH, EGGS, NUTS  
AMINO ACIDS  
FORMED AT RIBOSOMES  
CHON  
PROTEINS  
USED AS ENERGY SOURCE ONLY WHEN OTHER CARBS AND LIPIDS ARE IN SHORT SUPPLY

## NUCLEIC ACID

DNA, RNA  
NOT FOUND IN CELL MEMBRANE  
NUCLEOTIDE  
CHONP  
NUCLEIC ACIDS  
FORMED IN THE NUCLEUS  
TYPICALLY NOT AN ENERGY SOURCE